

Recovery Plan Action Status

Plan Name: Recovery Plan for the Molokai Plant Cluster (16 spp.)

Plan Status: Final

Plan Date: 26-Sep-96

Lead Agency: USFWS

Lead Office: Pacific Islands Fish And Wildlife Office

(808)

792-9400)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Pilo (Hedyotis mannii), No common name (Tetramolopium rockii), No common name (Phyllostegia mannii), Haha (Cyanea mannii), Ko'oko'olau (Bidens wiebkei), Lo'ulu (Pritchardia munroi), No common name (Silene lanceolata), Alani (Melicope reflexa), No common name (Silene alexandri), No common name (Schiedea lydgatei), `Awikiwiki (Canavalia molokaiensis), `Oha wai (Clermontia oblongifolia ssp. brevipes), Haha (Cyanea procera), No common name (Stenogyne bifida), Pua`ala (Brighamia rockii), Koki'o ke'oke'o (Hibiscus arnottianus ssp. immaculatus)	1	12	Identify and map all extant wild populations	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, The Nature Conservancy of Hawaii, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Department of Defense, National Park Service	Research: Population Surveys	Contract, Internal Field Assistance, Species Expert	This is an ongoing action, as the status of the species and their threats change constantly.

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Pilo (Hedyotis mannii), No common name (Tetramolopium rockii), No common name (Phyllostegia mannii), Haha (Cyanea mannii), Ko'oko'olau (Bidens wiebkei), Lo'ulu (Pritchardia munroi), No common name (Silene lanceolata), Alani (Melicope reflexa), No common name (Silene alexandri), No common name (Schiedea lydgatei), 'Awikiwiki (Canavalia molokaiensis), 'Oha wai (Clermontia oblongifolia ssp. brevipes), Haha (Cyanea procera), No common name (Stenogyne bifida), Pua'ala (Brighamia rockii), Koki'o ke'oke'o (Hibiscus arnottianus ssp. immaculatus)	1	13	Delineate management units	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, The Nature Conservancy of Hawaii, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, Private landowners	Management: Planning	Contract, Internal Administrative, Internal Technical Assistance, Species Expert	This task has been initiated through the development of essential plant habitat by the HPPRCC and CH designations, but needs to be refined for each species and its full recovery needs.

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Pilo (Hedyotis mannii), No common name (Tetramolopium rockii), No common name (Phyllostegia mannii), Haha (Cyanea mannii), Ko'oko'olau (Bidens wiebkei), Lo'ulu (Pritchardia munroi), No common name (Silene lanceolata), Alani (Melicope reflexa), No common name (Silene alexandri), 'Awikiwiki (Canavalia molokaiensis), 'Oha wai (Clermontia oblongifolia ssp. brevipes), Haha (Cyanea procera), No common name (Stenogyne bifida), Pua'ala (Brighamia rockii), Koki'o ke'oke'o (Hibiscus arnottianus ssp. immaculatus)	1	1511	Construct and maintain fencing	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, The Nature Conservancy of Hawaii, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Department of Defense, National Park Service, Private landowners	Management: Habitat Maintenance and Manipulation, Management: Predator and Competitor Control	Contract, Internal Field Assistance, Volunteer	Fencing is initiated for Kamakou Preserve and is partially complete for Pelekunu Preserve, East Molokai Watershed Partnership, and Kalaupapa National Park.

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Pilo (Hedyotis mannii), No common name (Tetramolopium rockii), Ko'oko'olau (Bidens wiebkei), No common name (Silene lanceolata), Alani (Melicope reflexa), No common name (Schiedea lydgatei), 'Awikiwiki (Canavalia molokaiensis), Pua 'ala (Brighamia rockii)	1	152	Conduct alien plant control	Ongoing Not Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, The Nature Conservancy of Hawaii, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Department of Defense, National Park Service, Private landowners	Management: Habitat Maintenance and Manipulation, Management: Predator and Competitor Control	Contract, Internal Field Assistance, Volunteer	Control of alien plants is an ongoing task that may be reduced to low maintenance and monitoring levels, but will never be completely eradicated, especially as new pest plant species are continually introduced to Hawaii and can become established in natural areas. Effective control methods are continually being developed by the Invasive Species Committees on each island and the results are applied to other natural areas.
Haha (Cyanea mannii), Lo'ulu (Pritchardia munroi), 'Oha wai (Clermontia oblongifolia ssp. brevipes), Haha (Cyanea procera), Pua 'ala (Brighamia rockii)	1	154	Control rodents	Ongoing Not Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Department of Defense, National Park Service, Private landowners	Management: Predator and Competitor Control	Contract, Internal Field Assistance, Internal Technical Assistance	Rodent control is currently only conducted within the immediate vicinity of those species which are known to be impacted by rodents, including species of the genera Brighamia, Clermontia, Cyanea, and Pritchardia. Large-scale rodent control will not be possible until aerial pesticide application is registered for use in the state of Hawaii.

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Pilo (Hedyotis mannii), No common name (Tetramolopium rockii), No common name (Phyllostegia mannii), Haha (Cyanea mannii), Ko'oko'olau (Bidens wiebkei), Lo'ulu (Pritchardia munroi), No common name (Silene lanceolata), Alani (Melicope reflexa), No common name (Silene alexandri), No common name (Schiedea lydgatei), 'Awikiwiki (Canavalia molokaiensis), 'Oha wai (Clermontia oblongifolia ssp. brevipes), Haha (Cyanea procera), No common name (Stenogyne bifida), Pua'ala (Brighamia rockii), Koki'o ke'oke'o (Hibiscus arnottianus ssp. immaculatus)	3	51	Investigate feasibility and desirability of reintroduction	Ongoing Not Current	Prior to FY 1995		U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division	Management: Planning, Management: Reintroduction	Contract, Graduate Student, Internal Technical Assistance, Species Expert	This task is considered crucial for any species with fewer than 50 individuals remaining in the wild. The Molokai Plant Extinction Prevention program initiated in FY 2006 will look for reintroduction sites to conduct small-scale management and reintroduction for such species on Molokai.

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Pilo (Hedyotis mannii), No common name (Tetramolopium rockii), No common name (Phyllostegia mannii), Haha (Cyanea mannii), Ko'oko'olau (Bidens wiebkei), Lo'ulu (Pritchardia munroi), No common name (Silene lanceolata), Alani (Melicope reflexa), No common name (Silene alexandri), No common name (Schiedea lydgatei), 'Awikiwiki (Canavalia molokaiensis), 'Oha wai (Clermontia oblongifolia ssp. brevipes), Haha (Cyanea procera), No common name (Stenogyne bifida), Pua'ala (Brighamia rockii), Koki'o ke'oke'o (Hibiscus arnottianus ssp. immaculatus)	3	52	Develop and implement specific plans for reestablishment	Ongoing Not Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division, Private landowners	Management: Planning, Management: Reintroduction	Contract, Graduate Student, Internal Technical Assistance, Species Expert	Reintroduction is occurring for some species in this recovery plan, but detailed reintroduction plans have not been developed.

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Pilo (Hedyotis mannii), No common name (Tetramolopium rockii), No common name (Phyllostegia mannii), Haha (Cyanea mannii), Ko'oko'olau (Bidens wiebkei), Lo'ulu (Pritchardia munroi), No common name (Silene lanceolata), Alani (Melicope reflexa), No common name (Silene alexandri), No common name (Schiedea lydgatei), 'Awikiwiki (Canavalia molokaiensis), 'Oha wai (Clermontia oblongifolia ssp. brevipes), Haha (Cyanea procera), No common name (Stenogyne bifida), Pua'ala (Brighamia rockii), Koki'o ke'oke'o (Hibiscus arnottianus ssp. immaculatus)	3	61	Determine number of populations and individuals needed for long-term survival	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division	Other: Regulations, Research: Competition, Research: Demographic Studies, Research: Genetics, Research: Habitat Requirements, Research: Management Techniques, Research: Population Surveys, Research: Predation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Pilo (Hedyotis mannii), No common name (Tetramolopium rockii), No common name (Phyllostegia mannii), Haha (Cyanea mannii), Ko'oko'olau (Bidens wiebkei), Lo'ulu (Pritchardia munroi), No common name (Silene lanceolata), Alani (Melicope reflexa), No common name (Silene alexandri), No common name (Schiedea lydgatei), 'Awikiwiki (Canavalia molokaiensis), 'Oha wai (Clermontia oblongifolia ssp. brevipes), Haha (Cyanea procera), No common name (Stenogyne bifida), Pua'ala (Brighamia rockii), Koki'o ke'oke'o (Hibiscus arnottianus ssp. immaculatus)	3	62	Refine downlisting and delisting criteria	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Division of Forestry and Wildlife, Hawaii Department of Land and Natural Resources, U.S. Geological Survey, Biological Resources Division	Other: Regulations, Research: Competition, Research: Demographic Studies, Research: Genetics, Research: Habitat Requirements, Research: Habitat Status, Research: Management Techniques, Research: Population Surveys, Research: Predation	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	